

CLAIMS

WHAT IS CLAIMED IS:

- 5 1. A coated paper comprising a paper substrate coated on least one side with a pigmented coating that provides a glossy coating surface; wherein said pigmented coating comprises a mixture of at least three different pigments and a binder.
- 10 2. The coated paper according to Claim 1, wherein at least four different pigments are present in said pigmented coating.
- 15 3. The coated paper according to Claim 1, wherein at least five different pigments are present in said pigmented coating.
- 20 4. The coated paper according to Claim 1, wherein at least six different pigments are present in said pigmented coating.
- 25 5. The coated paper according to Claim 1, wherein said pigmented coating further comprises a lubricant.
- 30 6. The coated paper according to Claim 1, wherein said pigments are selected from the group consisting of calcium carbonates, clay, plastic pigments, titanium oxide, calcined clay, **satin white, silica, alumina silicates, talc, aluminium trihydrates** and polymethyl methacrylate beads.
7. The coated paper according to Claim 1, wherein said pigments are selected from the group consisting of calcium carbonates, clay, plastic pigments, titanium oxide and calcined clay, all having particle sizes in the range of 0.1 to 2 microns.
8. The coated paper according to Claim 1, wherein said pigment is polymethyl methacrylate beads having particle sizes in the range of 5 to 50 microns and is present in amounts up to 2 weight % based on the dry weight of the total pigment.

9. The coated paper according to Claim 1, wherein said binder is selected from the group consisting of vinyl acetate acrylate, styrene acrylate and styrene butadiene acrylic copolymers.

5 10. The coated paper according to Claim 1 wherein said binder has a glass transition temperature in the range of -5 to 30°C.

11. The coated paper according to Claim 1, wherein the Scott internal bond of the coated paper is in the range of 150 to 500.

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12. The coated paper according to Claim 1, wherein the Parker Print Surface of the coated paper is in the range of 0.8-2.0.

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13. The coated paper according to Claim 1, wherein the delta coefficient of friction of the coated paper is in the range of 0.06 to 0.20.

14. The coated paper according to Claim 1, wherein the coated paper provides enhanced toner adhesion in colour and monochrome electrophotographic imaging applications.

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15. The coated paper according to Claim 1, wherein the coated paper the TAPPI 75-degree gloss is in the range of 45-85%.

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16. The coated paper according to Claim 1, wherein the coated paper has high blister resistance.

17. The coated paper according to Claim 1, wherein said paper substrate has a formation index greater than 70.

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18. The coated paper according to Claim 1, wherein said paper substrate has a surface resistivity in the range from 1×10^{10} ohms/square to 1×10^{12} ohms/square.

19. The coated paper according to Claim 1, wherein the total amount of pigments in the coating is from 50 to 90 weight % and the amount of binder in the coating is from 8 to 20 weight % based on the total weight of the coating.

5 20. The coated paper according to Claim 19, wherein said pigments in said pigmented coating comprise calcium carbonate present from 25 to 75 weight %; clay present from 20 to 70 weight %; calcined clay present from 2 to 10 weight %; and plastic pigment present from 2 to 10 weight %, wherein the weight %'s are based on the dry weight of the total pigment.

10 21. The coated paper according to Claim 19, wherein said pigment in said pigmented coating comprises titanium dioxide present from 1 to 5 weight % based on the dry weight of the total pigment.

15 22. The coated paper according to Claim 1, wherein said pigmented coating is coated on both sides of said substrate.

23. The coated paper according to Claim 1, wherein said pigmented coating is suitable for use in electrophotographic and offset printing.

20 24. A coated paper comprising a paper substrate coated on least one side with a pigmented coating; wherein said pigmented coating comprises a lubricant, a binder and at least four different pigments.

25 25. The coated paper according to Claim 24, wherein said pigmented coating comprises:
25 to 75 weight % calcium carbonate;
20 to 70 weight % clay;
2 to 10 weight % calcined clay; and
2 to 10 weight % plastic pigment;
wherein said weight %'s are based on the dry weight of the total pigment.

30 26. The coated paper according to Claim 24, further comprising titanium oxide present in amounts of 1 to 5 weight % based on the dry weight of the total pigment.

27. The coated paper according to Claim 24, further comprising polymethyl methacrylate beads present in amounts up to 2.0 weight % based on the dry weight of the total pigment.

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28. The coated paper according to Claim 24, wherein said binder is selected from the group consisting of vinyl acetate, styrene acrylate and styrene butadiene acrylic copolymers and is present in amounts of 8 to 20 weight % based on the total weight of the coating.

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